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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,410	12/03/2003	Norbert Weghaus	WEGHAUS1	4749
1444	7590	03/20/2006	EXAMINER	
BROWDY AND NEIMARK, P.L.L.C. 624 NINTH STREET, NW SUITE 300 WASHINGTON, DC 20001-5303			ADDISU, SARA	
			ART UNIT	PAPER NUMBER
			3722	

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/725,410

Applicant(s)

WEGHAUS ET AL.

Examiner

Sara Addisu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2003 and 30 June 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1, page 5, lines 6-20 claims a first side of the teeth having guide edges without cutting ability and the second sides being relieved surfaces that do not rest on the profile flank over a full height of the profile flank and being non-cutting relieved edges. It is not clear from the Specification and drawings how a broach cutting teeth that cuts only on its bottom side and having non-cutting sides could while having a shape as shown in Figure 3, could form profiles 15 and 16. For the purpose of this Office Action, Examiner is interpreting the amendment (page 5 of claim 1, lines 15-17), as "the relieved surface of the second side does not touch the profile flank".

Drawings

The drawings are objected to because it is not clear from the Specification and drawings how a broach cutting teeth that cuts only on its bottom side and having non-cutting sides could while having a shape as shown in Figure 3, could form profiles 15 and 16.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

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replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1-6, as best understood, are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Psenka (U.S. Patent No. 2,683,919), in view of Applicant's Admitted Prior Art (AAPA).

Psenka teaches an internal broach (10) for internally broaching tooth space (profiles) (30 or 40), defined by a bottom and profile flanks. Psenka also teaches a broach having a shank (with central longitudinal axis) leading in a direction of broaching and a series of circular [annular] blades (toothed sections, therefore having a distance (i.e. pitch between the teeth) with several rows of broach cutting teeth (bottom cutting blades as well as first and second sides allocated to the flanks) disposed successively counter to the direction of broaching and parallel to the longitudinal axis (see figure 1 & 3), to form the desired depth and shape ('919, Col. 3, lines 1-12). Psenka also teaches cutting teeth (E-G) having a bottom-cutting blade ('919, Col. 4, lines 10-12), side (72) with guiding function (also admitted by Applicant's remark, page 10, lines 4-5) that form profile flanks (e.g. 52) and a non-cutting relieved edge (74 at the vicinity of pitch a) on the opposite side of side (72) and form flanks in the vicinity of the pitch ('919, figure 5 and Col. 4, lines 16-26). The bottom cutting blade transitions into a relieved side surface (74), therefore the relieved side surface does not rest on the profile flank until the engagement with the bottom-cutting blade. The relieved surface (74) of the second side never touches the profile flank. Psenka also teaches the bottom cutting blades being designed for cutting over a full profile width ('919, Col. 4, lines 52-55). Additionally, the guide edges are unrelieved surfaces (therefore having no flank pitch) (Col. 6, lines 4-6). Regarding claim 4, Psenka teaches in figure 1, broach cutting teeth disposed in rows

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(parallel to the central longitudinal axis) as well as side by side relative the direction of broaching such that they form helically extending chip spaces with respect to the central longitudinal axis. Regarding claims 3, 5 and 6, Psenka teaches a broach designed to cut helical teeth, tooth spaces, splines or splineways, when drawn through a hole in a work piece ('919, Col. 1, lines 1-4).

However, Psenka fails to teach the bottom surfaces of the bottom-cutting blade being a relieved. Applicant's Admitted Prior Art (AAPA) teaches that it is customary for the bottom cutting blades to have a relief surface (Specification Page 10, lines 8-9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Psenka invention to have a relieved bottom-cutting blade, as taught by AAPA, because AAPA teaches that it is customary for the bottom cutting blades to have a relief surface.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sara Addisu at (571) 272-6082. The examiner can normally be reached on 8:30 am - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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SA
3/16/06



BOYER D. ASHLEY
SUPERVISORY PATENT EXAMINER